Mastogenius, sp.

Niger, nitidus, convexus, crebre punctatus. Long. $2\frac{3}{4}$ mill.

Hab. Hong Kong.

This species much resembles M. felix, but is black. The thorax is more rounded at the sides, much resembling the thorax of some Cardiophori. The prosternum has a distinct trace of the antennal groove; the surface appears smooth, the punctures distinct, separated from each other by about two diameters of a puncture; the fine lines bordering the sternum gently curved. Tarsi with the basal joint about equal to the two following taken together.

Mastogenius, sp.

Niger, nitidus, crebre sat fortiter punctatus. Long. 3 mill.

Hab. —. Received from the "Entomological Club." Very close to the preceding, but much more strongly punctured. The head is much more distinctly sulcate. The thorax a little more convex.

XVI.—New Species of Pyralidæ from the Khasia Hills. By W. WARREN, M.A., F.E.S.

[Continued from vol. xvii. p. 466.]

Subfamily PYRAUSTINÆ.

Genus Syllythria, Hübn. Syllythria metallica, sp. n.

Fore wings yellow; the costa and hind margin broadly metallic purple; a black discal spot and another before it in the cell; antemedian, median, and postmedian lines blood-red, united in places by blood-red lines along the veins; the purple marginal line tinged with red internally; fringe yellow, with red base. Hind wings white, somewhat yellowish tinged; a metallic purple blotch on hind margin in middle, preceded by some red scales. Head, face, thorax, and abdomen yellow, with red scales intermingled. The whole surface of both wings and of body is dusted with

shining scales. Underside pale yellow; costa of foré wings broadly purple-black, costa of hind wings near base somewhat shouldered and fringed with long reddish hairs.

Expanse of wings 13 millim. One male from the Khasias.

Genus LEPIDOPLAGA, Warr.

Lepidoplaga longicorpus, sp. n.

Fore wings quite as elongate as in elongalis, Warr., the yellow ground-colour intermediate between the pale yellow of that species and the deep yellow of flavofimbriata, Moore; the fuscous suffusion as deep as in the latter; the lines much more distinct; the outer line starting from a dark brown costal spot at two thirds; in the hind wings this line is curved, not straight, and only visible in the centre of the wing, not reaching nearly to the hind margin; the narrow yellowish marginal space with a series of distinct black dots in both wings, those of the hind wings almost contiguous. Thorax and abdomen dark fuscous, the abdomen as long as the fore wing. Underside darker grey, with the tufts leaden grey. Fore tarsi white.

Expanse of wings 20 millim. One male from the Khasias.

In this species the costa of fore wings becomes yellow only towards apex, whereas in *elongalis* it is broadly pale yellow throughout; the hind wings are narrow and not elbowed in the middle of hind margin.

Lepidoplaga elongalis, sp. n.

Resembles L. flavofimbriata, Moore (Mabra), but the wings narrower, more elongate; the yellow ground-colour and the fuscous-grey suffusion alike paler; the fovea beyond the cell, which in flavofimbriata is slightly before the middle, is here rather beyond the middle and more elongate; the outer line is much less distinct, rising at barely two thirds, whereas in flavofimbriata it rises at three fourths, and, instead of being curved at once from the costa, runs out slightly oblique to the second median, along which it goes inwards to the end of cell and then straight to inner margin; the first line is only faintly perceptible, oblique. Hind wings with costal region pale; traces of a dark outer line, which runs from two thirds of costa nearly straight to hind margin, before which it curves towards anal angle; the pale yellow hind margin of both wings is entirely unmarked by black dots. Underside

of both wings glossy grey, with all the margins yellowish; both the scale-tufts much larger than in flavofimbriata, that at end of cell being greatly extended, nearly one third as long as the wing and much whiter; the hind wings are broad, with a perceptible elbow in middle. Fore tarsi yellow.

Expanse of wings 18 millim. Several males from the Khasias.

Genus CIRCOBOTYS, Butler.

Circobotys aurimargo, sp. n.

Fore wings fuscous, with a reddish tinge; the costa more narrowly, the hind margin more broadly, yellow; the lines very indistinct; antemedian at one fourth, oblique outwards; postmedian at two thirds, vertical to middle, then running straight inwards, and again vertical to inner margin at middle; discal spot and another before it in the cell, both very obscure; fringe yellow. Hind wings like fore wings, but the hind margin not so broadly yellow and ground-colour paler, semitransparent. Head, thorax, and abdomen ochreous fuscous. Underside like upper, but paler. Wings of male narrower and more elongate than of female.

Expanse of wings 28 millim. A fair number from the Khasias.

POLYCHORISTA, gen. nov.

3. Fore wings narrow; costa straight for two thirds, then convex; apex much produced, but not acute; hind margin very oblique, scarcely curved; anal angle indefinite. Hind wings twice as wide as fore wings, triangular; both angles rounded, but prominent; hind margin nearly straight, with a bend shortly before anal angle; costa strongly shouldered at base. Abdomen of male very long, with large anal tuft. Thorax large, hairy, with bushy patagia; antennæ (3) simple, three fourths of the length of wing; forehead slightly produced below; labial palpi rostriform, broad, porrect; maxillary palpi slender, filiform; tongue and ocelli present; middle tibiæ much enlarged and flattened; hind tibiæ with four spurs, the outer ones very long, the inner short; a pair of scaly flaps from abdomen behind the hind legs. Neuration: fore wings, cell not half as long as wing, narrow; discocellular concave outwards; first median at one half, depressed at its origin, and preceded by a hyaline impression, more or less hidden above by long hairs from the base of the wing; second median close before the end, third from the end

of cell; lower radial from shortly above the angle; upper radial and fifth subcostal from upper angle of cell, the stalk of the third and fourth from just before the angle, the second closely approximated to it; first subcostal remote, before two thirds. Hind wings with cell excessively short, the angulation of the discocellular running up nearly to base; the costal vein strongly developed at base; the two subcostals from angle of cell, the first anastomosing for a considerable distance with the costal; radial from the lower arm of discocellular; last two medians from the end of cell, first at one half.

Type Polychorista calvatalis, Swinh. (Thliptoceras).
Col. Swinhoe's type was a female. The structure of the male removes it from Thliptoceras.

Genus Protonoceras, Warr.

Protonoceras lugens, sp. n.

Fore wings dark mouse-colour, with the lines blackish, thick, first close to base, second at three fourths, vertical from costa and on inner margin beyond middle, and forming a shallow bidentate sinus between; a rather large cell-spot; fringes unicolorous except above anal angle, where there is a small white spot. Hind wings somewhat darker, with blackish cell-spot and outer line as in fore wings; white spot in fringes larger and further from anal angle. Head, thorax, and abdomen concolorous. Underside of wings, body, and legs bluish white, with all the markings distinct, blackish; palpi blackish externally.

Expanse of wings, & 24, \, 30 millim.

Several from the Khasias.

Genus EBULEA, Guen.

Ebulea? anomalalis, sp. n.

Fore wings mouse-colour, with a thick dusting of lengthened ochreous scales; the lines darker, first at one fourth, curved to inner margin at one third; basal area darker, with a subbasal reddish shade or fascia; second line at three fourths, forming the usual sinus in the middle, but not running in so far as usual, and reaching inner margin at quite two thirds; discal spot dark; fringe grey, with two darker lines; a row of very minute pale spots at end of veins. Hind wings the same, without first line. Head, thorax, and abdomen all concolorous. Underside paler, especially of the hind wings; outer line darker in both wings and forming dark spots on veins. Antennæ lamellate and subdentate, not simply filiform and pubescent, as usual in *Ebulea*, but the neuration is identical with that of *E. intensalis* and *ochrei-punctalis*, to which it appears most allied.

Expanse of wings 26 millim. One male from the Khasias.

Ebulea decoloralis, sp. n.

Fore wings reddish ochreous, with all the basal half suffused with dull brown, giving the wing a smoky appear-The lines dark fuscous, first from one fourth of costa to one third of inner margin, slightly wavy; second from three fourths of costa to two thirds of inner margin, very wavy, and describing a broad but shallow sinus outwards in midwing, and approaching first line on inner margin; orbicular stigma small, round; reniform lunular, its lower end touching a diffuse darker brown blotch; fringes dark brown, rather lighter towards apex, with a fine light brown line at base. Hind wings like fore wings, without the first line; costal area whitish, basal area darker, more mixed with grey than that of fore wings; fringes dark brown, but pale at anal angle. Head, palpi, thorax, and abdomen smoky brown; anal tuft of male yellowish ochrous. Underside of fore wings ochrous, tinged with rusty, the base cinereous; of hind wings ochreous yellowish; the fringe of both wings dark brown.

Expanse of wings 30 millim.

A male and female from the Khasias.

Akin to Ebulea intensalis, Swinh., but differing in colour, the wings narrower, basal line of fringes without whitish spots.

Ebulea ochreipunctalis, sp. n.

3. Fore wings dull reddish fuscous, with fine dark irroration; the colour much as in E. intensalis, Swinh.; the lines darker, first at one fourth, oblique outwards to inner margin beyond one third, second at three fourths, oblique from costa, then forming a sinus with four teeth (often marked as spots), shortly incurved, but not as far as the discocellular, and reaching inner margin at two thirds; a dark obscure discal spot; fringes concolorous with dark basal line, preceded by a row of yellow dots at end of veins. Hind wings dark fuscous, with darker curved and dentated outer line; the disk much suffused with darker and the hind margin tinted with reddish; fringe as in fore wings, with a pale ochreous line at base. Head and thorax like fore wings; abdomen cinereous, with whitish anal tuft. Underside of fore wings

reddish, grey in the disk; of hind wings ochreous, suffused with reddish towards margins; both wings with outer line of red-brown dots on veins.

2. Fuscous, without any reddish tinge; the costa of fore

wings fulvous ochreous on each side of the outer line.

Expanse of wings 32 millim. Several from the Khasias.

The male is very much like *E. intensalis* of Swinhoe, but is without the dark discal blotch, and the outer line is rather different in its course.

EBULEODES, gen. nov.

Like Ebulea in build and appearance, but separated by several points: the antennæ of the male are lamellate, pubescent; the basal joint porrect, forming a hollow sheath, out of which the shaft rises at right angles; labial palpi porrect, rostriform, the second joint bent above in the middle; maxillary palpi very small; ocelli present; the male has a tuft of hair from base of inner margin of fore wings, a comb of hair along the internal vein of hind wings, and the fringes very long and somewhat curled from halfway up inner margin to end of the internal vein on the hind margin. Neuration: fore wings, cell half as long as wing; the discocellular oblique; first median at two thirds, second close to end of cell, third from the end; lower radial just above the end; upper radial and last subcostal rather approximated and both from the discocellular; second subcostal stalked with third and fourth.

Type Ebuleodes simplex, sp. n.

Ebuleodes simplex, sp. n.

Fore wings dull yellowish, with a slight greyish suffusion in parts; the lines grey, feebly marked, first from costa near base, running obliquely outwards to submedian fold, then nearly vertical to inner margin at one third; second at three fourths, also running at first obliquely outwards for one third, then straight towards anal angle as far as the first median, and, lastly, basewards with two sharp angulations to inner margin at two thirds, the upper two thirds formed more or less of lunular spots; a slight dark spot in cell and a grey lunule at the end; disk with a slight greyish cloud; fringe pale grey, glossy. Hind wings like fore wings, with the costal region whitish; a curved submarginal line not reaching the costa; fringe towards anal angle long and pale ochreous,

like the comb of hair on the internal vein and the tuft from base of fore wings. Head, thorax, and abdomen concolorous; palpi with basal joint white, second and third joints ochreous. Underside pale straw-colour, with only the outer line faintly indicated.

Expanse of wings 30 millim. One male from the Khasias.

Genus Paliga, Moore.

Paliga contractalis, sp. n.

Like P. ochrealis, Moore, but much smaller; the exterior line forming a smaller sinus, and more sharply angled below the sinus than in ochrealis.

Expanse of wings 24 millim.

Many examples from the Khasias and other places.

Genus Acharana, Moore.

Acharana subænescens, sp. n.

Fore wings greasy-looking, dull fuscous grey, with no distinct markings, the margins of the central field being indicated by pale ochreous shades, the inner curved and indistinct, the outer running from three fourths of costa nearly straight to the first median, thence inwardly along that nervule to near below the second discal spot, and then with an outward curve to inner margin at one third; the inner area where it touches these paler shades somewhat darker than the rest; two blackish spots in the cell, the outer the larger and darker, separated by a subquadrate patch of pale ochreous. Hind wings rather paler, with a dull brown discal spot and an angulated central shade, margined in parts with paler; fringe of both wings concolorous; both wings have a slight bronzy appearance. Head, thorax, and abdomen concolorous or rather darker than wings. Underside of wings paler, with all the markings more distinct; underside of abdomen and pectus shining white; legs white; fore tibiæ and spots on fore tarsi brown.

Expanse of wings 30 millim. Two males from the Khasias.

PROPHANTIS, nom. nov.

The above name is proposed for the two species octoguttalis, Feld., and castoralis, Wlk. (=purpurascens, Moore), hitherto Ann. & Mag. N. Hist. Ser. 6. Vol. xviii. 8

placed under Archernis, Meyrick, with the type of which, Archernis callixantha, Meyr., they are, however, not congeneric. To this genus a third species is now referred provisionally, the type being a female.

Prophantis? triplagalis, sp. n.

Fore wings shining, purplish grey; the costa and a line of marginal dots yellow; a square, pale yellow, dark-edged spot in middle of cell; a larger irregularly reniform blotch from costa beyond cell pale yellow, with darker dentate outer edge and a faint yellowish spot or two obliquely below it towards base; the outer dark edge really representing the postmedian line, which is faintly marked on the costa and can be traced to inner margin; fringe grey, with base darker. Hind wings like fore wings, with no inner spot. Head, thorax, and abdomen rather darker than wings; palpi dark purple, white beneath; tongue white; legs and abdomen beneath white; fore knees dark brown. Underside of wings duller than upper, with all the markings shown.

Expanse of wings 30 millim. One female from the Khasias.

Genus MIMORISTA, Warr.

Mimorista marginalis, sp. n.

Fore wings yellow, suffused with fulvous brown; a dark subcostal streak, becoming fainter towards the postmedian line; costa above it brownish yellow, brighter yellow beyond the outer line; the lines thick, purple-brown, first near base, curved and somewhat oblique outwards; basal area fulvous; a round dark brown spot in cell, with paler centre; a square brown-edged stigma at end of cell, its centre purple-grey; a darker edged elongated oval stigma beneath the small spot in cell; a diffuse fuscous suffusion beyond the first line, extended along the median vein; space between the two cellspots bright yellow; postmedian line at three fourths, irregularly dentate for first third, then describing a rounded sinus, curving upwards to beneath the discal spot, where it touches a purple spot between the first and second medians, then sinuous and oblique to inner margin before two thirds; a broad purplish-fuscous marginal band, not quite touching costa, with two curves on its inside and touching outer line at the bottom of the sinus; the veins slightly paler, and a row of pale dots along hind margin between them; fringe greyish yellow, with darker interrupted line near base. Hind

wings paler yellow, without suffusion; a dark discal ring and squarely angled outer dark line; marginal band as in fore wings, but hardly so wide. Palpi and face dark fuscous; head and thorax fulvous grey; two basal segments of abdomen yellowish, the rest fulvous, with white segmental rings. Underside dull yellow, with all the markings showing through.

Expanse of wings 30-33 millim. A male and female from the Khasias.

Genus Goniorhyncus, Hmpsn.

Goniorhyncus marginalis, sp. n.

Fore wings pale yellow, with all the markings as in G. obliquistriga, Warr., but very much more developed; the costa and hind margin broadly dark brown; a diffuse brown streak along the whole of the submedian; the veins from the lower end of cell to the sinus in the exterior line brown; centre of discal mark with white scales, and a small white dot in the cell in the centre of the antemedian line; fringe dark brown, with pale fine basal line. Hind wings the same. Head, thorax, and abdomen pale yellow, mixed with blackish; the abdomen becoming orange towards the end. Underside dull yellow, with the markings hardly visible.

Expanse of wings 26 millim. One male from the Khasias.

This may be a very strongly marked variety of G. obliquistriga.

Goniorhyncus obliquistriga, sp. n.

Fore wings pale yellow; the costa somewhat broadly, the hind margin narrowly, dark brown; a small brown dot below the costal stripe near base, and another on inner margin below it, representing the subbasal line; a stronger brown dot at one third, with a vertical brown streak below it from the antemedian line; postmedian line at three fourths, incurved at first, then vertical, then outcurved, vertical again over the three medians, acutely incurved to below the discal mark and obliquely inclined to inner margin beyond middle, closely approximated there to the first line; reniform stigma hourglass-shaped, the upper half the larger, bluish white, with thick dark brown edges, with a diffuse brown oblique streak from its lower edge to hind margin above anal angle; fringe brown, with a pale line at base. Hind wings with discal spot and a very strongly angulated postmedian line brown:

fringe and hind margin as in fore wings. Head, face, thorax, and abdomen yellow; collar narrowly brown; anal tuft of male large. Underside pale yellow, with the markings very scanty.

Expanse of wings 24 millim. Two males from the Khasias.

CENOCNEMIS, gen. nov.

Differs from *Enchocnemidia*, Led., in the legs of the male not being tufted with hair, though the tufts on the under surface of the hind wings are present as in that genus.

Type Cenocnemis incurvata, sp. n.

Cenocnemis incurvata, sp. n.

3. Fore wings bright green, with the extreme costa at base and apex fuscous; fringes fuscous, ochreous at base; a scarcely perceptible blackish dot on discocellulars; the hind margin is slightly incurved in its lower third. Hind wings with the hind margin strongly incurved below the middle, bright green, with the costal and inner margins whitish, and a whitish streak along the submedian fold and the internal vein; a very conspicuous brown-black elongated cell-spot; fringes as in fore wings, with some dark spots in front of the pale base along the indented part. Head, face, palpi, thorax, and abdomen all bright green; anal tuft black. Underside paler, bluish green; the fore knees brown; the hair-tufts on the hind wings pale ochreous.

2. Like male, but the hind margin of hind wings fully

rounded, not incurved.

Expanse of wings, 3 36, 2 38 millim.

A pair from E. Java.

Genus Enchocnemidia, Led.

Enchocnemidia fuscitibia, sp. n.

Fore wings and fringes green; the costa faintly paler; a very minute dark cell-dot. Hind wings green, with costal area whitish. Head, face, palpi, thorax, and abdomen green; anal tuft whitish, dark grey at base and blackish beneath. Underside paler; the fore knees brown; tufts on hind wings pale ochreous; tufts on hind legs pale fuscous externally, dark grey internally, much smaller than in *E. phryneusalis*.

Expanse of wings 34 millim. One male from Tenimber.

Genus Parotis, Hübn. Parotis planalis, sp. n.

Fore wings bright green, with the costa broadly reddish ochreous; fringes grey, with their base greenish; no trace of cell-spot. Hind wings green, with costal and inner marginal areas paler; fringe ochreous grey, paler towards anal angle; no cell-spot. Head, face, thorax, and abdomen bright green; anal tuft dark grey; palpi bright brown. Underside paler; the costa and costal fringe ochreous.

Expanse of wings 30-33 millim.

Two males from Dili.

Genus GLYPHODES, Guen.

Glyphodes pedenotata, sp. n.

Fore wings white, with olive-ochreous and purplish-brown shades; inner margin broadly white at base, the base above the white being marked with purple-brown, which colour extends some way along the submedian vein, and below that vein beyond the recurved internal vein, the base olive-ochreous; an oblique antemedian olive-ochreous streak edged with brown, separated by a narrow oblique streak of white from the basal area, which is also edged with brown; it is followed by a broader white oblique space, edged with brown and ending in an acute point; from centre of costa two darker olive fasciæ with dark purple edges and separated by a narrow white interrupted space run nearly across the wing; the first of these below the middle becomes purple and contains a white streak on its inside; these are followed by a broad white blotch from the costa, bluntly rounded beneath, and with a projection externally pointing towards the apex; postmedian line white, broader above, elbowed opposite the cell, then oblique and parallel to hind margin, the space between it and the costal white blotch being filled in with dark purplish brown; marginal area purplish grey, divided into two fasciæ by a paler line, which, like the white postmedian line, is diffusely edged externally with dark purple; the outer of the two fasciæ is limited above by an oblique line from apex, before which there is a triangular white costal spot; fringe purplish grey, with a dark purple basal line; all the markings are paler above the subcostal vein, and are limited below by the submedian vein as far as the postmedian line. Hind wings with more than the basal half white, tinged with violet-grey, and with a dark discal mark; the marginal area like that of the fore wing from the postmedian line outward, this line being in the hind wing edged internally by a thick purple-brown line, which, like the postmedian itself, is bent and angled before the anal angle along the hind margin. Palpi and antennæ white; head and centre of thorax apparently ochreous; patagia white; abdomen ochreous. Underside dull whitish, with the dark upper markings showing indistinctly through.

Expanse of wings 32 millim. One female from Lifu.

Distinguished from the allied forms by the shape of the oblique white costal blotch with its purple-brown external edging.

Glyphodes tumidalis, sp. n. .

Intermediate in size between conclusalis, Wlk., and violalis, Warr.; distinguished by the larger swollen second white hyaline spot of the fore wings, round which the somewhat whiter postmedian line is rather bent. In the hind wings the dark marginal border is of nearly uniform width throughout, not, as in the other two species, broadened out towards apex, and its internal edge is therefore nearly straight; like violalis the whole marginal area is dark and the violet shade straight and near the centre; fringe of fore wings often wholly dark, the basal dark line always entire; of fore wings white throughout, and without a dark basal line except just before anal angle.

Expanse of wings 30 millim.

A few from Sikkim.

Glyphodes violalis, sp. n.

Like G. conclusalis, Wlk., but larger; differing in the following points:—In conclusalis the violet postmedian line follows immediately after the second of the two hyaline spots, is more strongly concave, and slightly bent both below the costal white spot and before that on the inner margin; in violalis a fairly broad deep purple space separates the spot from the line, which is uniformly curved from end to end; in conclusalis the dark edging of the postmedian line is followed immediately by a dull violet shade; in violalis this violet shade is much nearer the centre of the dark marginal area; this difference is still more evident in the hind wings, where in violalis the violet shade runs nearly straight from anal angle through the middle of the dark purple margin, while in

confusalis it follows closely the inner edge of the dark fascia, and the fascia itself is darkest in the centre, and becomes again tinged with violet towards the hind margin. There is generally present a third much smaller white spot towards the base of cell of fore wings. In both forms the white fringes have a broad dark basal line, which is interrupted above the anal angle of both wings, and the whole of the friuge at the middle of each margin is dark from base to apex.

Expanse of wings 34 millim.; conclusalis expands 26 to

28 millim.

In Walker's description of conclusalis he calls the first of the two white spots in the fore wings a white "dot," and the spot is, in fact, very small in the type specimen; but, as a rule, the first spot forms an oblique oval; in violalis both spots are in general narrower towards the inner margin than in conclusalis.

[To be continued.]

MISCELLANEOUS.

On a Collection of Barnacles. By H. A. Pilsbry.

THE barnacles described were obtained from the bottom of the iron ship 'Puritan' of Glasgow, which had been dry-docked in Cramp's shipyard after a voyage from San Francisco to Hong Kong, and to Philadelphia via Java and India. The forms represented were Balanus tintinnabulum, L., B. tintinnabulum zebra, Darwin, B. tintinnabulum spinosus, Gm., Tetraclitu porosa patellaris, Darwin, Lepas anatifera, L., and L. Hillii, Leach. The forms ranked as varieties of B. tintinnabulum retain their individuality perfectly, although growing side by side under apparently identical external conditions, so that their differential characteristics can scarcely be attributed to unlike environmental factors. The variety of Tetraclita porosa seems to be a rare form, originally described by Darwin from three examples taken off a ship's bottom in Boston by Dr. A. A. Gould. It is very unlike the ordinary form of the species. Specimens of Ostrea rivularis, Gld., are attached to some of the barnacles. As this is a species of East-Asian seas, it is very probable that the load of barnacles was obtained in China, although the Balanidæ themselves have been so widely diffused by commerce that alone they afford but little evidence of their original patria. The specimens were procured and presented to the Academy by Master Lester Bernstein. - Proc. Acad. Nat. Sci. Philad., March 31, 1896, p. 208.